D125B Dual Class B Initiating Module

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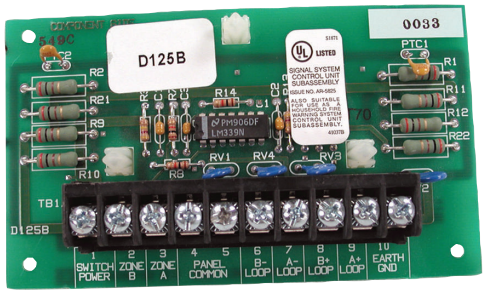

- Two separate powered detector loops
- Suitable for 12 VDC or 24 VDC, two-wire or four-wire detectors
- Up to 50 two-wire 12 VDC glass break detectors
- Reports individual loop alarm, individual loop trouble, and ground fault
- Manually resets latching devices from control panel or remote central station

The D125B has two separate NFPA Class B (Style B) powered loops. The module supervises each of the loops for opens, shorts, or ground faults. Both loops can be powered with either 12 VDC or 24 VDC to connect compatible two-wire detectors or other two- or four-wire devices such as retarded waterflow switches, manual stations, heat detectors, or glass break detectors.
The D125B is suitable for connecting fire or burglary devices in commercial, industrial, and institutional applications. Schools, offices, and health care facilities are typical commercial applications.

Functions

Loop Supervision

The D125B needs to be electrically connected to earth ground and to the control panel's common. The D125B has a supervisory output terminal for each of its loops. All terminal designations are clearly marked on the module circuit board.
To supervise the loops, install an end-of-line (EOL) resistor beyond the last detector of each protective loop. If you are replacing a D125 or D125A Module with the D125B, use the 1.5 kΩ resistor (P/N: 15-03130-000) installed with the original system. If you are installing a D125B in a new system or are adding additional devices to an existing system, use the 1.8 kΩ resistor (P/N: F01U009011) supplied with the module.
The D125B shorts the protective loop on the control panel when the high (+) and low (-) side of either module loop is shorted together or when a smoke detector activates. The D125B opens the protective loop on the control panel during the following conditions:

- Either of the module protective loops are opened.
- The D125B Interface module is unpowered.
- Either the high (+) side of the loop or the low (-) side of the loop is shorted to ground.

With the D9412GV3, D7412GV3, D7212GV3, D9412GV2, D7412GV2, D7212GV2, D9412G, D7412G, and D7212G Control Panels, a short to ground causes a ground fault condition when ground fault detect is enabled.
When programming for fire applications, refer to the appropriate control panel's operation and installation guide.

Notice
Do not mix 12 VDC and 24 VDC detectors on the same D125B Module.

24 VDC Applications

An auxiliary power supply is used in 24 VDC applications. The auxiliary power supply provides power for the module and all devices connected to the two loops.

Notice

The power supply is not provided with the unit. Any power supply installed must be UL listed for use with Bosch fire products.

The D130 Relay Module is used for 24 VDC applications. CMD 47 is used to reset 24 VDC smoke detectors. Refer to the control panel's operation and installation guide.
Unpowered initiating devices such as waterflow switches, manual stations, and heat detectors are installed without the D130 Relay Module.

Certifications and approvals

Region	Certification	
USA	UL	AMCX: Central Station Alarm Units (UL1610, UL1635), AMCX7: Central Station Alarm Units Certified for Canada (ANSI/UL 1635), AOTX: Local Alarm Units (UL464, UL609), S525), APAW: Police Station Alarm Units (UL365, UL464), APAW7: Police-station-connected Alarm Units Certified for Canada (CAN/ULC -S303, CAN/ULC-S304, CAN/ULC-S525), APOU: Proprietary Alarm Units (UL1076), NBSX: Household Burglar Alarm System Units (UL1023), UOJZ: Control Units, System (UL864, 9th edition), UTOU: Control Units and Accessories - Household System Type (UL985)
	FM	D125B
	CSFM	see our website
	FDNY-CoA	#6174 UL 864 9th Edition
	NYC-MEA	12-92-E, Vol. XV

Installation/configuration notes

Compatible Products

The following products are compatible with the D125B Dual Class B Initiating Module:

Category	Product ID	Product Description
Control Panels	G-series[1]	Control panels
	B-series[2]	Control panels
	D9412[3], D7412[3], D7212[3]	Control panels
	D9112B1[3], D7212B1[3]	Control panels
	D8112[3]	Control panel
Detectors	For a list of compatible two-wire detectors, refer to the *D125B Installation Guide*.	
Enclosures	D7103	Small enclosure (gray)
	D8103	Universal enclosure (gray)
	D8108A	Attack-resistant enclosure (gray)
	D8109	Fire enclosure (red)
Modules	For a list of compatible modules, refer to the *D125B Installation Guide*.	

[1] G-series = D9412GV4, D7412GV4, D7212GV4*, D9412GV3, D7412GV3, D7212GV3*, D9412GV2, D7412GV2, D7212GV2*, D9412G[3], D7412G[3], D7212G[3]*

[2] B-series = B5512 and B4512

[3] These products are legacy products and have been investigated for compatibility only to UL864 8th edition.

* The D7212 models are not listed for commercial fire applications.

Mounting Considerations

The D125B module mounts in the Bosch control panel enclosure using screws included with the unit. Use a D137 Mounting Bracket to install additional modules in the same enclosure, or when installing the D125B in an approved adjacent enclosure. Separate enclosures must be within 20 ft (6.1 m) of the control panel enclosure and connected by conduit.

Wiring Considerations

Notice

When used in a fire system, NFPA 72 prohibits this product from sharing a communications bus with non-fire devices.

The D125B needs to be electrically connected to the control panel's common terminal.

Parts included

Quant.	Component
1	D125B module
2	1.8 kΩ EOL resistors (P/N: F01U009011)
1	Hardware pack
1	Literature pack

Technical specifications

Mechanical Properties

Dimensions (H x W x D):	5 in. x 3 in. x 0.8 in. (12.7 cm x 7.6 cm x 2.0 cm)

Power Requirements (12 VDC Circuits)

Current (alarm):	1 loop only:	75 mA maximum
	Both loops:	145 mA maximum
Current (standby):	1 loop only:	12 mA maximum

	Both loops:	24 mA maximum
Voltage (nominal)	12 VDC supplied by control panel or by UL864 or UL1481 Listed 12 V power supply	

Power Requirements (24 VDC Circuits)

Current (alarm):	1 loop only:	168 mA maximum
	Both loops:	300 mA maximum
Current (standby):	1 loop only:	25 mA maximum
	Both loops:	50 mA maximum
Voltage (nominal)	24 VDC supplied by UL864 or UL1481 Listed 24 V power supply	

Two-wire Loop (Class B, Style B)_Characteristics

Current (alarm):	12 VDC:	>11.8 mA
	24 VDC:	>24.1 mA
Current (trouble):	12 VDC:	<3.5 mA
	24 VDC:	<7.5 mA
Detector Current:	12 VDC:	3 mA maximum
	24 VDC:	7 mA maximum
Wiring Impedance:	50 Ω maximum	

Ordering information

D125B Dual Class B Initiating Module
The module provides 2 Class B (Style B) powered loops for connecting 12 or 24 VDC, two- or four-wire fire or burglary devices or up to 50 two-wire 12 VDC glass break detectors. It reports individual loop alarm or trouble and ground fault; and allows latching device reset from panel or central station.
Order number **D125B**

Accessories

D137 Mounting Bracket
Used to mount accessory modules in D8103, D8108A, and D8109 enclosures.
Order number **D137**

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2691432971 | en, V3, 17. Jul 2014